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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/931,913
Filing Date: August 20, 2001
Appellant(s): NGUYEN ET AL.

Mareesa A. Frederick
For Appellant

EXAMINER'S ANSWER

MAILED
JAN 23 2007
GROUP 1700

This is in response to the appeal brief filed November 08, 2006 appealing from the Office action mailed February 24, 2006.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|--------------------|--------------|--------|
| US. 5,872,111 | Au et al. | 2-1999 |
| US 2001/0008630 A1 | Pyles et al. | 7-2001 |

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20, 22-28 and 30-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Au et al. (US 5,872,111). This action is set forth in the previous office action, mailed on August 31, 2005.

Au (US' 111) teaches a shampoo composition comprising sodium hydroxide as claimed in claims 1-4 (see col. 14, line 30), wherein sodium hydroxide is presented in the amounts of 0.01 to 10% which overlapped with the claimed ranges as claimed in claims 5-8 and 43-45 (see col. 14, lines 33-34), oxygen-or chlorine-liberating bleaches (oxidizing agents) (see col. 22, lines 30-31), hydrogen peroxide in the amount of 0.03% to 3% which overlapped with the claimed ranges as claimed in claims 9-12 (see col. 30, lines 5-16), clay materials such as aluminum silicates as cation exchange components as claimed in claims 13-15 (see col. 15, lines 5-7), zeolites and aluminosilicates as claimed in claims 16-18 (see col. 20, line 37), water as a solvent as claimed in claims 19-20 (see col. 14, line 44), complexing agent or sequestering agent that dissociate hydroxide compounds such as disodium ethylenediamine tetraacetate, citric acid, sodium basic silicates and tripotassium phosphate as claimed in claims 22-27 and 30-37 (see col. 14, lines 14-32) and amino acids as claimed in claim 28 (see col. 10, line 64), additives such as cationic surfactants as claimed in claim 39 (see col. 14, lines 20-21). Au also teaches a liquid personal product composition (shampoos for hair) as claimed in claims 40-41 (see col.3, lines 28-30 and col. 9, lines 1-2).

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The instant claims differ from the reference by reciting that at least one hydroxide compound and at least one oxidizing agent to be presented in the sufficient quantities in the composition to effect lanthionization of keratinous fibers.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a composition for lanthionizing keratinous fibers because Au et al. (US' 111) clearly teaches a composition comprising hydroxide compound (sodium hydroxide), oxidizing agent and complexing agent as described above, and wherein the hydroxide compound and oxidizing agent are presented in the amounts overlapped with the claimed amounts, and, thus, a person of the ordinary skill in the art would be motivated to optimize the amounts of the hydroxide compound and complexing agent in the composition in order to get the maximum effective amounts of these ingredients in the composition and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claim 38, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make such a composition by incorporating more than one complexing agent because the reference teaches a number of complexing agents that may be used in the composition (see col. 14, lines 29-32), and, thus, a person of the ordinary skill in the art would have been motivated to select more than one complexing agent from those taught by the reference and, would expect such a composition to have similar properties to those claimed, absent, unexpected results.

With respect to claim 42, it would have been obvious to one having ordinary skill in the art at the time the invention was made to activate the composition by using heat because the reference teaches a composition that comprises all the claimed ingredients wherein the formation

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of the composition required heating (see col. 24, lines 56-61), and, thus, a person of the ordinary skill in the art would expect such a composition to have similar properties to those claimed, absent unexpected results.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Au et al. (5,872,111) in view of Pyles et al. (US 2001/0008630 A1).

The instant claim differs from the reference by reciting monosodium glutamate as specific species of an amino acid.

However, the primary reference of Au (US' 111) teaches a composition comprising amino acids as a genus (see col. 10, line 64).

Pyles (US'630) teaches in analogous art a hair treating composition comprising sodium glutamate as claimed in claim 29 (see page 4, paragraph 0091).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time of invention would have been motivated to select any of the species of the genus taught by reference, including those of the claims, because an ordinary artisan would have the reasonable expectation that any of the species of the genus would have similar properties and thus, the same use as the genus as a whole.

(10) Response to Argument

The examiner has reviewed Appellant's arguments and respectfully disagrees with counsel's allegations. Specifically, appellants argue that the examiner failed to provide evidence showing a motivation or suggestion to modify Au or to combine Au and Pyles to arrive at the presently claimed invention and the examiner has not shown that the cited references teach or suggest each claim limitation.

The examiner's position is such that the arguments are not found persuasive because of the following reasons.

In establishing a prima facie case of obviousness, three criteria must be met. See *in re Vaeck*, 947 F.2d. 488, 20 USPQ 2d 1438 (Fed. Cir. 1991). First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. (see MPEP 2143).

In this case the three criteria have been met, because all references are in the same analogous art of keratin fibers treating formulation.

Au et al. (US' 111) teaches and discloses detergent and personal product compositions as the equivalence compositions that have common properties (see col. 3, lines 23-36). The personal product type would consist of hair care products, bath products (detergents), cleansing products (detergents), shampoos (detergents) such as conditioning shampoos, hair wave neutralizing shampoos, hair setting products, hair styling products, permanent wave products and hair straightening/relaxing products (see page 31, lines 26-38). Au et al. (US' 111) teaches a shampoo composition comprising agents such as sodium hydroxide and sequestering agents (complexing agents) and wherein these agents generally are used individually at a level of from about 5.0 to about 5.0% of the composition (see col. 14, lines 30-34). Au et al. (US' 111) also in analogous and equivalent composition, teaches a detergent composition comprising sequestering agents (complexing agents) and bleaching system (oxidizing agents) such as oxygen or chlorine-liberating bleaches in the amounts of 0 to 20% (see col. 22, lines 30-45). It is further taught by

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Au et al. that the composition comprises bleaching agents (oxidizing agents) such as hydrogen peroxide in the amounts 0.01 to 7% (see col. 30, lines 5-16). Therefore, there is a sufficient motivation to one having ordinary skill in the art to be motivated to incorporate the bleaching agents (oxidizing agents) in the detergent composition (cleansing composition) as taught by Au et al. in the shampoo composition (cleansing and/or hair straightening/relaxing composition) to arrive at the claimed invention because Au et al. teaches the equivalence between these compositions, and, thus, a person of the ordinary skill in the art would expect such a composition to have similar properties to those claimed, in the absent of contrary.

With respect to appellant's argument that Au et al. never mentions that any of the numerous disclosed compositions can contain a bleaching agent, such as hydrogen peroxide to lanthionize keratinous fibers, the examiner would like to point out that Au et al. teaches a detergent composition comprising both glycosylamine surfactants and bleaching system (see col. 22, lines 37-45) and wherein hydrogen peroxide liberating or generating compounds (bleaching agents) are preferred (see col. 30, lines 6-11). It is further taught by Au et al. that oxygen or chlorine-liberating bleaches are used in the composition as part of the conventional materials that may be present in minor amounts in the composition for exhibiting good dissolving or dispersing behaviours (see col. 22, lines 22-24). Therefore, the bleaching compounds include hydrogen peroxide as oxygen-liberating bleach are not only used in the process of manufacturing glycosylamide surfactants as the appellants contended.

With respect to the appellant's argument that the disclosure of oxygen or chlorine-liberated bleaches is buried in a laundry list of ingredients that can be used in a detergent composition, the examiner would like to point out that Au et al. teaches the equivalence between

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detergent and personal product compositions that have common properties (see col. 3, lines 23-36). Further, Au et al. clearly teaches a composition comprising bleaching system in the amounts of 0 to 20% (see col. 22, line 45). Therefore, a person of the ordinary skill in the art would expect such a composition to have a bleaching system in sufficient amounts that covered the claimed amounts.

With respect to the appellant's argument that Au et al. nowhere teaches or suggests a composition for lanthionizing keratinous fibers wherein the at least one hydroxide compound and the at least one oxidizing agent are present in the composition in a sufficient quantity to effect lanthionization of keratinous fibers, the examiner would like to point out that Au et al. teaches equivalence compositions (detergents and shampoos) that have common properties (see col. 3, lines 23-36) and wherein these compositions comprise bleaching agents (oxidizing agents) and hydroxide compounds) and wherein these ingredients are presented in the compositions in the amounts that covered the claimed amounts as mentioned above. Therefore, the combined compositions should have similar properties to those claimed.

Further, appellants have not shown on record the criticality of the combination of the claimed invention over the compositions of the prior art of record. Furthermore, the only Example recited in the specification at page 20, represents Relaxing Efficiency (%RE) of hair treated with various compositions comprising different percentage amounts of hydrogen peroxide and sodium hydroxide. This example is not commensurate with the claims because the example does not teach or disclose the claimed limitations that required at least one complexing agent. Furthermore, the example does not support the limitation "sufficient quantity to effect lanthionization of keratinous fibers" because the recited Example show that the highest relaxing

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efficiency is obtained when sodium hydroxide is presented in the amount of 0.5 % and hydrogen peroxide is presented in the amount of 12% (see Specification at page 20). Such specific presented amounts are not recited in the claims to effect lanthionization of keratinous fibers as claimed. Therefore, a person of the ordinary skill in the art would expect that any range of percentage amounts of hydrogen peroxide and sodium hydroxide that within the claimed percentage ranges would be sufficient for lanthionization of keratinous fibers.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Au et al. (5,872,111) in view of Pyles et al. (US 2001/0008630 A1).

With respect to the rejection of claim 29 under 35 U.S.C. 103(a) as being unpatentable over Au et al. (US'111) in view of Pyles et al. (US' 630 A1), Appellants argue that Au et al. does not suggest the use of amino acids as a genus because Au et al. teaches only essential amino acids and does not teach non-essential amino acid and, thus, there is no motivation would have existed to incorporate a non-essential amino acid.

The examiner respectfully disagrees with the above arguments because Au et al. (US' 111) as a primary reference suggests the use of amino acids as the moisturizing agents in the composition (see col. 10, lines 62-65). Pyles et al. (US' 630 A1) as a secondary reference in analogous art of hair treating formulation, teaches a composition comprising sodium glutamate as claimed (see page 4, paragraph, 0091). Therefore, there is a sufficient motivation to one having ordinary skill in the art to be motivated to incorporate the amino acid species of sodium glutamate as taught by Pyles et al. in the composition of Au et al. to arrive at the claimed invention with a reasonable expectation of success for a moisturizing purposes.

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Further, with respect to the appellant's argument that essential amino acids refers to specific category of amino acids excluding Glutamate, the examiner position is that the primary reference of Au (US' 111) suggests the use of amino acids as a genus in the composition (see col. 10, line 64). Pyles (US' 630) as a secondary reference clearly teaches the claimed species of glutamate, and, therefore, there is a motivation to one having ordinary skill in the art to incorporate any amino acids including the glutamate compound as claimed in the composition of Au (US' 111) and would expect such a composition to have similar properties to those claimed in the absence of contrary.

Furthermore, appellants have not shown on record the criticality of the claimed amino acid species of monosodium glutamate over the composition of the closest prior art of record.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Accordingly, the Office maintains that the Examiner has met the burden to establish the prima facie showing of obviousness. Viewed as a whole, the invention as claimed would have been obvious to one of ordinary skill in the art at the time of the invention.

Finally, the Examiner request that this Board when viewing the evidence as a whole, and lacking any secondary indicia of non obviousness, affirm the decision of the Examiner in whole.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted

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Eisa Elhilo (Primary Examiner)
January 18, 2007

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